

CONTENTS: VOLUME 72

Number 1, pp. 1-270, February 1992

	PAGE
Light and life on RRS 'Discovery'. Herring, P.J. and Partridge, J.C.	1
Demersal ichthyofaunal distribution in the abyssal eastern North Atlantic, with special reference to <i>Coryphaenoides (Nematonurus) armatus</i> (Macrouridae). Merrett, N.R.	5
Wing-loading, stability and morphometric relationships in flying fish (Exocoetidae) from the north-eastern Atlantic. Davenport, J.	25
Locomotion and visual behaviour of mid-water crustaceans. Land, M.F.	41
Regional morphological variations in the compound eyes of certain mesopelagic shrimps in relation to their habitat. Gaten, E., Shelton, P.M.J. and Herring, P.J.	61
Adaptations of tapeta in the eyes of mesopelagic decapod shrimps to match the oceanic irradiance distribution. Shelton, P.M.J., Gaten, E. and Herring, P.J.	77
A note on the elongated eye of the octopus <i>Vitreledonella richardi</i> . Land, M.F.	89
Short-wave absorbing pigments in the ocular lenses of deep-sea teleosts. Douglas, R.H. and Thorpe, A.	93
Single and multiple visual pigments in deep-sea fishes. Partridge, J.C., Archer, S.N. and Van Oostrum, J.	113
Mixed light imaging system for recording bioluminescence behaviours. Widder, E.A.	131
Bioluminescence of the oceanic apogonid fishes <i>Howella brodiei</i> and <i>Florenciella lugubris</i> . Herring, P.J.	139
Polymerase chain reaction and 16S rRNA gene sequences from the luminous bacterial symbionts of two deep-sea anglerfishes. Haygood, M.G., Distel, D.L. and Herring, P.J.	149
On the locomotion of ascidian tadpole larvae. Bone, Q.	161
Some features of the territories in the breeding males of the intertidal blenny <i>Lipophrys pholis</i> (Pisces: Blenniidae). Almada, V.C., Gonçalves, E.J., Oliveira, R.F. de and Barata, E.N.	187
The origin and recruitment of bass, <i>Dicentrarchus labrax</i> , larvae to nursery areas. Jennings, S. and Pawson, M.G.	199
Species composition of demersal fish in the Rockall Trough, north-eastern Atlantic, as determined by different trawls. Gordon, J.D.M. and Bergstad, O.A.	213
Larval and early postlarval shell morphology of several venerid clams. Goodsell, J.G., Fuller, S.C., Eversole, A.G., Castagna, M. and Lutz, R.A.	231
Short Communications:	
Growth bands in the sea urchin <i>Echinus esculentus</i> : results from tetracycline-mark/recapture. Gage, J.D.	257
An epibiont on the red-water ciliate <i>Mesodinium rubrum</i> . Crawford, D.W.	261
Marine pelagic ciliates and their productivity during summer in Plymouth coastal waters. Pilling, E.D., Leakey, R.J.G. and Burkill, P.H.	265
Book Notices	269

	PAGE
Age and growth estimation of the European squid, <i>Loligo vulgaris</i> , based on statolith microstructure. Natsukari, Y. and Komine, N.	271
Production of soma and gonad in maturing female <i>Illex argentinus</i> (Mollusca: Cephalopoda). Hatfield, E.M.C., Rodhouse, P.G. and Barber, D.L.	281
Production of soma and gonad in maturing male <i>Illex argentinus</i> (Mollusca: Cephalopoda). Rodhouse, P.G. and Hatfield, E.M.C.	293
Timing of spawning and recruitment in <i>Loligo forbesi</i> (Cephalopoda: Loliginidae) in Scottish waters. Lum-Kong, A., Pierce, G.J. and Yau, C.	301
Life at low oxygen tensions: the behaviour and physiology of <i>Nautilus pompilius</i> and the biology of extinct forms. Wells, M.J., Wells, J. and O'Dor, R.K.	313
Metallothionein induction in <i>Littorina littorea</i> (Mollusca: Prosobranchia) on exposure to cadmium. Bebianno, M.J., Langston, W.J. and Simkiss, K.	329
The effect of starvation on the biochemical composition of the rotifer <i>Brachionus plicatilis</i> . Frolov, A.V. and Pankov, S.L.	343
Biochemical polymorphism in bass, <i>Dicentrarchus labrax</i> , in the waters around the British Isles. Child, A.R.	357
Morphological and other evidence on the degree of genetic differentiation between populations of <i>Nereis diversicolor</i> . Hateley, J.G., Grant, A., Taylor, S.M. and Jones, N.V. ...	365
Larval and early post-larval development of the protobranch bivalve <i>Solemya velum</i> (Mollusca: Bivalvia). Gustafson, R.G. and Lutz, R.A.	383
The effect of predation on the life histories of <i>Littorina obtusata</i> and <i>Littorina mariae</i> . Williams, G.A.	403
The pennatulid <i>Kophobelemnion stelliferum</i> (Cnidaria: Octocorallia) in the Porcupine Seabight (north-east Atlantic Ocean). Rice, A.L., Tyler, P.A. and Paterson, G.J.L.	417
Observations on the swimming and buoyancy of <i>Cymbulia peroni</i> (Gastropoda: Thecosomata) made from a submersible. Harbison, G.R.	435
Pairing behaviour, reproduction and diet in the deep-sea holothurian genus <i>Paroriza</i> (Holothurioidea: Synallactidae). Tyler, P.A., Young, C.M., Billett, D.S.M. and Giles, L.A.	447
Bioluminescence in the benthopelagic holothurian <i>Enypniastes eximia</i> . Robison, B.H.	463
Phagocyte interactions in echinoid and asteroid echinoderms. Dales, R.P.	473
Metals and melanomacrophages in flounder, <i>Platichthys flesus</i> , spleen and kidney. Pulsford, A.L., Ryan, K.P. and Nott, J.A.	483
Short Communications:	
Patterns of variation in Aat-1 allele frequencies in rough periwinkles (<i>Littorina</i>) suggest similar selection regimes rather than conspecificity. Grahame, J., Mill, P.J., Double, M. and Hull, S.L.	499
Microscopical observations on the excretory organs of the hydrothermal mussel <i>Bathymodiolus thermophilus</i> (Mollusca: Bivalvia). Auffret, M. and Le Pennec, M.	503
The first record of the short-beaked garfish <i>Belone svetovidovi</i> (Belonidae) in British waters. Swaby, S.E., Potts, G.W. and Wheeler, A.	507
Book Notices	509

	PAGE
Genetic population structure of <i>Neanthes succinea</i> (Polychaeta: Nereididae).	
Abbiati, M. and Maltagliati, F.	511
Evidence for thermal stability of ribosomal DNA sequences in hydrothermal-vent organisms. Dixon, D.R., Simpson-White, R. and Dixon, L.R.J.	519
Antibacterial activity in the haemocytes of the shore crab, <i>Carcinus maenas</i> .	
Chisholm, J.R.S. and Smith, V.J.	529
Loss of meal antigenicity during digestion in <i>Sepia officinalis</i> (Cephalopoda: Sepioidea). Kear, A.J. and Boyle, P.R.	543
Microscopy of the absorptive cells and gut-associated lymphoid tissue of the flounder <i>Platichthys flesus</i> . Jenkins, P.G., Pulsford, A.L. and Harris, J.E.	553
The costs of cell volume regulation: protein metabolism during hyperosmotic adjustment. Hawkins, A.J.S. and Hilbish, T.J.	569
Rapid shell closure in the brachiopods <i>Terebratulina retusa</i> and <i>Terebratalia transversa</i> . Ackerly, S.C.	579
Distribution and rhythmic locomotor patterns of estuarine and open-shore populations of <i>Carcinus maenas</i> . McGaw, I.J. and Naylor, E.	599
Observations on the ecology, behaviour, swimming mechanism and energetics of the neustonic grapsid crab, <i>Planes minutus</i> . Davenport, J.	611
The response of decapod and mysid crustaceans to artificially lighted trawls. Hargreaves, P.M. and Herring, P.J.	621
Physical factors affecting the fate of pedal mucus produced by the common limpet <i>Patella vulgata</i> . Davies, M.S., Jones, H.D. and Hawkins, S.J.	633
Sea lice (Caligidae) on wrasse (Labridae) from selected British wild and salmon-farm sources. Bron, J.E. and Treasurer, J.W.	645
Development of superficial and lateral line neuromasts in larvae and juveniles of plaice (<i>Pleuronectes platessa</i>) and sole (<i>Solea solea</i>). Harvey, R., Blaxter, J.H.S. and Hoyt, R.D.	651
Distribution of <i>Ichthyophonus hoferi</i> (Mastigomycotina: Ichthyophonales) in yellowtail flounder, <i>Limanda ferruginea</i> , from the Nova Scotia Shelf, Canada. Rand, T.G.	669
Trophic structure within the Bristol Channel: seasonality and stability in Bridgwater Bay. Henderson, P.A., James, D. and Holmes, R.H.A.	675
The ecology of a coastal <i>Phaeocystis</i> bloom in the north-western English Channel in 1990. Davies, A.G., Madariaga, I. de, Bautista, B., Fernández, E., Harbour, D.S., Serret, P. and Tranter, P.R.G.	691
Phytoplankton biomass, light attenuation and mixing in the Shannon Estuary, Ireland. McMahon, T.G., Raine, R.C.T., Fast, T., Kies, L. and Patching, J.W.	709
Short Communications:	
<i>Rhizogeton nudum</i> (Cnidaria: Hydroida) in the British Isles. Jones, D.	721
Growth irradiance as a factor controlling the dark respiration rates of marine phytoplankton. Daneri, G., Iriarte, A., Garcia, V.M., Purdie, D.A. and Crawford, D.W.	723
<i>Fenestrulina asturiasensis</i> sp. nov. (Bryozoa: Cheilostomida) from the northern coast of the Iberian Peninsula. Alvarez, J.A.	727
Book Notices	731

	PAGE
Diel bioluminescence in heterotrophic and photosynthetic marine dinoflagellates in an Arctic fjord. Lapota, D., Young, D.K., Bernstein, S.A., Geiger, M.L., Huddell, H.D. and Case, J.F.	733
Reproductive biology of the holothurian <i>Holothuria forskali</i> (Echinodermata). Tuwo, A. and Conand, C.	745
Ovarian ultrastructure and vitellogenesis in ten species of shallow-water and bathyal sea cucumbers (Echinodermata: Holothuroidea). Eckelbarger, K.J. and Young, C.M.	759
The encapsular developmental sequence of the mesogastropod <i>Turritella communis</i> (Gastropoda: Turritellidae). Kennedy, J.J. and Keegan, B.F.	783
Biological observations on young scallops, <i>Pecten maximus</i> . Minchin, D.	807
Food availability for sprat larvae in the Irish Sea. Coombs, S.H., Nichols, J.H., Conway, D.V.P., Milligan, S. and Halliday, N.C.	821
Crab-eating in the diamondback terrapin <i>Malaclemys terrapin</i> : dealing with dangerous prey. Davenport, J., Spikes, M., Thornton, S.M. and Kelly, B.O.	835
Feeding spectrum of squid <i>Sthenoteuthis oualaniensis</i> (Oegopsida) in the eastern Pacific. Shchetinnikov, A.S.	849
Cephalopods from the stomachs of a Risso's dolphin (<i>Grampus griseus</i>) from the Mediterranean. Würtz, M., Poggi, R. and Clarke, M.R.	861
Distribution and position maintenance behaviour of the estuarine mysid <i>Neomysis integer</i> . Hough, A.R. and Naylor, E.	869
Swimming and body orientation of <i>Notolepis rissoi</i> in relation to lateral line and visual function. Janssen, J., Pankhurst, N.W. and Harbison, G.R.	877
Genetic divergence between branched and unbranched forms of the thecate hydroid <i>Aglaophenia pluma</i> . Thorpe, J.P., Ryland, J.S., Cornelius, P.F.S. and Beardmore, J.A.	887
The status of the genus <i>Prayoides</i> (Siphonophora: Prayidae). Pugh, P.R.	895
Short Communications:	
A new mesopelagic appendicularian: <i>Oikopleura villafrancae</i> sp. nov. Fenaux, R.	911
Biometrics, carbon and nitrogen content in the ophiuroid <i>Ophiothrix fragilis</i> . Davoult, D., Degros, N., Janquin, M.A. and Soyez, B.	915
Latitudinal displacements of the Gulf Stream and the abundance of plankton in the north-east Atlantic. Taylor, A.H., Colebrook, J.M., Stephens, J.A. and Baker, N.G.	919
Announcement	923
Book Notices	925
Annual Report 1991	927
Financial Statements 1991	984

CORRIGENDA

Page 297, line 14 for between mass of each organ, SCM and BM read between mass of each organ, SCM and ML;

Page 297, line 17 for organ and BM read organ and ML.

